STATE OF HAWAII
DEPARTMENT OF HEALTH
CLEAN WATER BRANCH

SECTION 401 WATER QUALITY CERTIFICATION (WQC)
INITIAL STAFF EVALUATION (ISE)

WQC No.: WQC 0000568
Originator: Edward Chen
Date: June 20, 2003

1.a. Applicant:

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Application:	**Dated**	**Date Received**
	May 23, 2002	May 31, 2002

Additional Information:	**Date Requested**	**Date Received**
	August 1, 2002 (Phone)	August 2, 2002(e-mail)

January 29, 2003 (01073CEC.03) February 21, 2003 (1811/353)

2. Project Name and Location:

RC18-96, Repair Bulkhead K12, Fleet and Industrial Supply Center
Pearl Harbor, Island of Oahu

3. Associated Federal Permit or License:

U.S. Army Corps of Engineers Nationwide Permit #3, Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA) of 1899.
File No. 200200354

4.a. Description of Proposed Activity:

The Pacific Division, Naval Facilities Engineering Command (PACDIVNAVFACENGCMD) proposes to repair the existing bulkhead K12. Repair involves installing a new epoxy coated steel sheet pile in front (outboard) of the existing bulkhead (approximately 520 feet in length). The maximum space between the new and existing sheet pile will be approximately five (5) feet. Approximately, 70 feet of the bulkhead that is adjacent to the Hotel Pier will be reinforced by stabilizing the soil to provide structural stability. Fill material will be placed between the existing and the new sheet piles. A new cathodic protection system will be installed for protection of the new sheet pile. The existing asphalt concrete pavement adjacent to the K12 wharf will be reconstructed.

The receiving State waters, Pearl Harbor, is classified by the Department as "Class 2, Inland Waters" for “Pearl Harbor Estuary” in accordance with HAR, §§11-54-03(b)(2) and 11-54-05.2(d)(2). Pearl Harbor is also listed by the Department as “Water Quality Limited Waters” for nutrients, suspended solids, turbidity and polychlorinated Biphenyls in accordance with Section 303(d) of the “CWA”. Pearl Harbor is listed as “high” priority for implementing Total Maximum Daily Load (TMDL) mitigative measures in accordance with CWA, subsection 303(e). The affected marine bottom ecosystem is classified by the Department as “Class II, Marine Bottom Ecosystem” for “Reef Flats and Reef Communities” in accordance with HAR, §§11-54-03(d)(2) and 11-54-07(e)(2)(B)(i).

EVALUATION:

On July 3, 2002, the Clean Water Branch (CWB) received a request (through fax transmittal) from the Regulatory Branch of the Honolulu Engineer District (HED), U.S. Army Corps of Engineers (COE), to review and provide comments on the Wharf K-12 repair project proposed by the PACDIVNAVFACENGCMD. In its letter, the HED/COE indicated that the work is subject to COE’s jurisdiction under Section 404 of the CWA for

the placement of fill material (sheet piles and associated fill material for bank stabilization) and Section 10 of the RHA for work within navigable waters under File No. 200200354. On July 10, 2002, the CWB requested (through fax transmittal) the HED to identify the type of the DA permit to be issued for the proposed repair project. On August 11, 2002, the CWB received a copy of the letter (dated June 22, 2002) from LTC Ronald N. Light of the HED to the Commander of the Pacific Division, Naval Facilities, Engineering Command (PACDOV/NAVFACENGCMD) which indicated that the project will be authorized under the COE's Nationwide permit (NWP) authorization #3 (Maintenance).

DA NWP #3 was reissued and published by the COE on January 15, 2002 (**Federal Register / Vol. 67, No. 10 / Tuesday, January 15, 2002 / Notices)** and became effective on **March 18, 2002**. The existing DA NWP #3 was conditionally certified by the Department of Health (Department) under a conditional blanket Section 401 WQC (File No. WQC 0000543), dated July 5, 2002. However, projects located in an "Estuary" or Water Quality-Limited Segments [WQLS, pursuant to CWA, Subsection 303(d)] such as the "Pearl Harbor Estuary"does not qualify for a coverage under conditions 1.b(3) and 1.b(7) of the conditional blanket Section 401 WQC. Wharf K-12 is located in Pearl Harbor. Therefore, in accordance with CWA, Subsection 401(a), Chapters 91, 92 and 342D of the Hawaii Revised Statute (HRS), and Chapter 11-54 of the Hawaii Administrative Rules (HAR), an individual application for a Section 401 WQC is submitted, and shall be processed. The processing of this Section 401 WQC application is also based on the requirements specified in the DA NWP published by the COE on January 15, 2002 (**Federal Register / Vol. 67, No. 10 / Tuesday, January 15, 2002 / Notices)** and effective on **March 18, 2002**. As part of the Section 401 WQC application reviewing and processing process, public participation is required. Pursuant to request contained in item 15 of the Section 401 WQC application, the staff recommends that the publication of a "Notice of Proposed Section 401 Water Quality Certification" (hereafter the "PN") in the applicable newspaper to fulfill the public involvement requirements. The public notice (PN) shall be placed in the **Honolulu Star Bulletin** in accordance with the "**STATEWIDE PUBLICATION OF PUBLIC AND PROCUREMENT NOTICES (IFB-02-064-SW) *April 1, 2002 through March 31, 2003"** (SPO Price List No. 02-21) to fulfill the applicable State's public participating requirements. Based on April 1, 2003 e-mail communication between the State Department of Accounting and General Services (Ms. Cara Sakata) and the CWB (Mr. Edward Chen), the SPO Price List 02-31 is extended for another 90 days. The PN is expected to be published prior to June 29, 2003 (last day of the 90-day extension). Therefore, the PN shall be placed in the **Honolulu Star Bulletin.** If the PN will be published after the June 29, 2003, the new SPO Price List shall be followed.

Pursuant to HAR, Chapter 11-55 and Appendices (become effective November 7, 2002), and effective March 10, 2003, a National Pollutants Discharge Elimination System (NPDES) permit for storm water discharge associated with construction activities (Phase 2) is required for a single and complete construction activity that will disturb total land areas of one (1) acre or more. In response to the CWB's written request, the

PACDIVNAVFACENGCMD indicated in its letter (No. 5090.A7 Ser ENV1811/353) of March 20, 2003 that "[T]he project will not disturb a total of (1) acre or more of land area." The PACDIVNAVFACENGCMD shown in the drawing C-3 that the AC removal area is 0.60 acre. If the AC removal area (0.60 acre) constitutes the total land disturbance area for the project, then, an NPDES permit for the construction activity is not required. There is no information on whether other land areas will be disturbed. However, in addition to repair wharf K-12, the PACDIVNAVFACENGCMD is also proposing to repair wharf H5 (File No. WQC 0000575) which is located immediately adjacent to the north end of wharf K-12 at the opposite side of the Hotel Pier. Should the PACDIVNAVFACENGCMD decide to construct both projects simultaneously, the acute cumulative impact resulting from the construction activities should be re-evaluated so as the requirement for an NPDES permit. Based on the construction drawing, the other possibility that an NPDES permit would be required will be the result of discharging construction site dewatering effluent. The PACDIVNAVFACENGCMD indicated in its response that "[A]lthough the need for dewatering or hydrotesting is not anticipated, no discharge of effluent into State waters will be allowed." There was no proposal to demonstrate how would the dewatering effluent, if any, be handled. Therefore, it is deemed appropriate to include in the Section 401 WQC a standard condition that requires the PACDIVNAVFACENGCMD to "**Obtain a National Pollutant Discharge Elimination System (NPDES) Permit for any discharge(s) that is regulated pursuant to CWA, Section 402, and HAR, Chapter 11-55 prior to the commencement of such a discharge**."

4.b. The discharge activity that the applicant is seeking coverage under this WQC application as indicated in the item 7.d of the application is **"[T]he discharge of the fill material between the existing and new sheet piles."**

EVALUATION:

Based on information contained in the application, the proposed discharge activity is more appropriate to be described as "to install a new epoxy-coated steel sheet pile in front (outboard) of the existing bulkhead (approximately 520 feet in length) and place the engineered fill material between the existing and new steel sheet pile." The maximum space between the new and existing sheet pile will be approximately five (5) feet.

4.c. Materials to be temporarily or permanently placed into the Pearl Harbor Estuary identified under this under this Section 401 WQC application include:

(1) Permanent placement of:

(a) Approximately 520 linear feet of a new epoxy-coated steel sheet pile in front (outboard) of the existing bulkhead. The maximum space between the new and existing sheet pile will be approximately five (5) feet.

(b) Approximately 3,300 cubic yards (CY) of engineered fill material between the new and existing sheet pile. The "engineered" fill material will consist of a mixture of expansive material, cement, fly ash, pozzalan, admixtures and water.

(c) A new cathodic protection system will be installed for protection of the new sheet pile.

(d) Concrete pile cap and the displacement water from the application of tremie concrete for the concrete cap construction.

(2) Temporary placement of a silt curtain.

EVALUATION:

The processing of a WQC application shall ensure that the project construction related discharge activities will comply with both the Federal and State Antidegradation Policies as specified in Section 131.12 of Title 40, Code of Federal Regulations (CFR), and HAR, Subsection 11-54-01.1, respectively.

40 CFR §131.12(a) requires that:

"The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

(3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected..."
Existing State requirements as specified in **HAR, §11-54-01.1** General policy of water quality antidegradation:

"Waters whose quality are higher than established water quality standards shall not be

lowered in quality unless it has been affirmatively demonstrated to the director that the change is justifiable as a result of important economic or social development and will not interfere with or become injurious to any assigned uses made of, or presently in, those waters."

40 CFR 131.12.a(3) requirements do not applicable to this water body. Pearl Harbor at project site is managed by the U.S. Navy. The repair work proposed for the Wharf K12 is expected to temporarily increase the pollutant levels of the water turbidity, total suspended solids, as well as other pollutants that attached to the suspended solids. These human induced alterations and pollution are expected to be temporary and could be properly controlled, minimized, or mitigated by implementing the appropriate and effective site-specific Best Management Practices (BMPs) and pollution control measures (such as the silt curtains or other appropriate and effective silt containment devices) during the construction period and restoring the affected aquatic site(s) after completed the construction activities. The implemented BMPs and pollution control measures shall be capable of properly isolate and confine the construction activities and to prevent/minimize the potential pollutants from adversely impacting the receiving State waters. The operation of the Wharf K12 is not expected to increase pollutant loadings as it is except when there is an increasing in water-dependent activities or there is a change of upland industrial activity that will change the quality of the storm water runoff.

According to information contained in Subsection 8.d of the WQC application, the PACDIVNAVFACENGCMD stated that "[T]he existing use is military use. The area is restricted and there are no recreational used in the area. The primary use of K12 is to support the mission of the Command Navy Region Hawaii by providing adequate waterfront facilities. Current/recent use of K12 has been for mooring barges, floating rubber fenders and camels. The asphalt concrete (AC) paved area adjacent to K12 is used as a parking lot for automobiles. The effect of the repair project will provide for the stable and safer bulkhead K12." Therefore, the proposed repair project could be considered meeting 40 CFR 131.12(a) requirements if water quality necessary to maintain the existing uses (military uses and protecting other aquatic animals frequent the project site) is maintained during the project construction.

At this time, the contractor has not been selected. The PACDIVNAVFACENGCMD shall submit the information on the selected general contractor to the CWB. Information shall, at a minimum, include the general contractor's legal name, address, contact person's name and position, telephone and fax numbers. The draft WQC will reflect this requirement.

5. CLASS OF RECEIVING WATER AND RECREATIONAL USES AT THE DISCHARGE SITE:

Pearl Harbor is classified by the Department as "Class 2, Inland Waters" for "Pearl Harbor Estuary" in accordance with HAR, §§11-54-03(b)(2) and 11-54-05.2(d)(2). Pearl Harbor is also listed by the Department as "Water Quality Limited Waters" for nutrients, suspended

solids, turbidity and polychlorinated Biphenyls in accordance with Section 303(d) of the "CWA". Pearl Harbor is listed as "high" priority for implementing Total Maximum Daily Load (TMDL) mitigative measures in accordance with CWA, subsection 303(e). The affected marine bottom ecosystem is classified by the Department as "Class II, Marine Bottom Ecosystem" for "Reef Flats and Reef Communities" in accordance with HAR, §§11-54-03(d)(2) and 11-54-07(e)(2)(B)(i).

EVALUATION:

HAR, §11-54-03(b)(2): stated, in part, that "the objective of class 2 waters is to protect their use for recreational purposes, the support and propagation of aquatic life, agricultural and industrial water supplies, shipping, and navigation. The uses to be protected in this class of waters are all uses compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in and on these waters. These waters shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class. No new treated sewage discharges shall be permitted within estuaries. No new industrial discharges shall be permitted within estuaries, with the exception of:

(A) Acceptable non-contact thermal and drydock or marine railway discharges within Pearl Harbor, Oahu;

(B) Stormwater discharges associated with industrial activities [defined in 40 C.F.R. Section 122.26(b)(14)] which meet, at the minimum, the basic water quality criteria applicable to all waters as specified in section 11-54-04(a), and all applicable requirements specified in chapter 11-55, titled "Water Pollution Control; and

(C) Discharges covered by a National Pollutant Discharge Elimination System general permit, approved by the U.S. Environmental Protection Agency and issued by the Department in accordance with 40 C.F.R. Section 122.28 and all applicable requirements specified in chapter 11-55, titled "Water Pollution Control."

HAR, §11-54-03(d)(2) stated that "It is the objective of class II marine bottom ecosystems that their use for protection including propagation of fish, shellfish, and wildlife, and for recreational purposes not be limited in any way. The uses to be protected in this class of marine bottom ecosystems are all uses compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation. Any action which may permanently or completely modify, alter, consume, or degrade marine bottoms, such as structural flood control channelization, (dams); landfill and reclamation; navigational structures (harbors, ramps); structural shore protection (seawalls, revetments); and wastewater effluent outfall structures may be allowed upon securing approval in writing from the director, considering the environmental impact and the **public interest** pursuant to sections 342D-4, 342D-5, 342D-6, and 342D-50, HRS in accordance with the applicable provisions of Chapter 91, HRS."

Wharf 12 is an existing wharf. The proposed construction activity is intended to enhance the existing uses provided by the existing wharf. Therefore, the proposed construction activity may be considered as allowable under HAR, §11-54-03(d)(2) requirements pending public interest review. If the applicant could provide applicable site-specific BMP and/or appropriate mitigative measures to adequately maintain the water quality at the project site during the construction period. The implementation of the appropriate site-specific BMPs measures is also to comply with HAR, Section11-54-03(b)(2) requirements.

The "**BEST MANAGEMENT PRACTICES PLAN, Special Project R18-96 Repair Bulkhead K12, Fleet and Industrial Supply Center, Pearl Harbor, Hawaii, May 2002**" submitted by the PACDIVNAVFACENGCMD is general in nature and does not contain certain site-specific control measures necessary to address the construction activities related potential pollution concerns. These issues were mentioned in the CWB's letter of January 29, 2003 and were not properly addressed by the PACDIVNAVFACENGCMD. Please see item 7, below, for detailed discussion.

In the letter of January 29, 2003, the CWB enclosed the following comment from the Department's Environmental Planning Office regarding CWA, Section 303(d) requirements and requested the PACDIVNAVFACENGCMD to review the comments and provide responses:

"This project is located in the Pearl Harbor watershed. Pearl Harbor is currently listed under section 303(d) of the Clean Water Act as being impaired by nutrients, turbidity, and suspended solids. The impaired status of these waters requires that the Department of Health establish Total Maximum Daily Loads (TMDLs) suggesting how much the existing pollutant loads should be reduced in order to attain water quality standards in the coastal waters.

Although these TMDLs are yet to be established and implemented, a first step in achieving TMDL objectives would be to prevent any project-related increases in pollutant loads.

The application package focuses on environmental controls, environmental protection, and best management practices to be implemented during construction of a pier. We suggest that the application also discuss how increases in existing pollutant loads would be prevented over the complete project life-cycle, for example by referencing applicable operation and maintenance documentation for this type of facility (including the adjacent parking lot) and for this military installation (e.g. long-term best management practice plans, spill prevention plans, standard operating procedures, and recurring work programs).

A TMDL technical study of water quality in streams in the Pearl Harbor watershed is underway, and these TMDLs are scheduled for completion by 2004. We therefore encourage the Department of the Navy to participate in the TMDL process and suggest that they consult with the Department of Health Clean Water Branch (Engineering Section) to

discuss how water pollution control permitting may be linked with TMDL implementation." The PACDIVNAVFACENGCMD responded that "[T]his project is to repair the severely deterioriated steel pile bulkhead at K12 and associated damage to the surrounding area. The use, operation, and maintenance will remain the same. With the same use, operation and maintenance, project-related increases in pollutant loads are not expected. The FISC is covered under the Commander Naval Base NPDES permit, which requires storm water pollution prevention plans. These plans have been developed and have been submitted t the State DOH CWB. Additionally, a spill prevention control and contingency (PPCC) plan has been developed for the FISC."

The EPA has recently announced its withdrawal of the mandatory TMDL implementation requirements in the Federal Register on March 19, 2003 (68 FR 13608). Based on item 9.a of the application, the construction activities will last approximately 12 months. Item 9.b of the application further indicated that the in-water construction activity may last six (6) months. The storm water impact resulting from the operation of the constructed activity may be regulated through the compliance of NPDES permit (File No. 1121466) issued by the Department On August 24, 2001. Therefore, it is also recommended that this WQC will only addressing construction activity related potential increase in pollutants loads with the expectation that the storm water discharge related TMDL issues will be properly addressed through the compliance of the NPDES permit (No. HI1121466) issued to the Navy Region Hawaii.

6. BIOLOGICAL, CHEMICAL, THERMAL AND ANY OTHER PERTINENT CHARACTERISTICS OF THE DISCHARGE:

The following information is contained in items 7 and 10:

a. Characteristics of the discharge and potential pollutants associated with the construction activity proposed:

Source	Composition	Quantity	Duration
Engineered Fill Material	Expansive material, cement, fly ash, pozzalan, admixtures and water	3,330 cy	One month

1. Characteristics of the dredged/excavated material

Source	Composition	Quantity	Duration
NA (NO DREDGED/ EXCAVATED MARINE SEDIMENTS. NO DISCHARGE OF DEWATERING			

Source	Composition	Quantity	Duration
EFFLUENT INTO PEARL HARBOR)			

EVALUATION:

The CWB specified in its letter of January 29, 2003 that: "[A]s specified in item 7.e of the application, a total of 3,330 cubic yards of fill material will be placed between the new and existing sheet pile. Please provide physical, chemical, biological, thermal, and any other pertinent characteristic and Material Safety Data Sheet (MSDS) of the following components of the fill material:

(1) Expansive material;

(2) Pozzalan (Pozzolan?);

(3) Fly ash; and

(4) Admixtures."

The PACDIVNAVFACENGCMD responded that "[T]he fill material between the new and existing sheet pile is a light weight cellular concrete (LCC). MSDS are specific to the manufacture and will not be available until the contractor delivers product data submittals. (1) Expansive material is dependent upon the engineered fill manufacture. (2) Fly Ash and Pozzolan shall conform to ASTM C 618. (3) Admixture shall conform to ASTM C 494/C 494M."

Therefore, the PACDIVNAVFACENGCMD needs to provide the missing MSDS for the "expansive material" prior to placement of the engineered material into State waters. The draft WQC reflects this requirement.

In addition, construction drawing shown that the new sheet pile will be coated with epoxy. There is no information regarding the "epoxy." Will the epoxy coating be applied by the manufacturer in its factory or would it be applied on-site by the contractor? What is the chemical component of the epoxy? Any BMPs measures proposed to totally isolate the epoxy application process and avoiding the direct or indirect discharges (including the airborne mist) into State waters?

7. TREATMENT APPLIED TO DISCHARGE AND DEGREE OF TREATMENT EXPECTED:

The following are the proposed control and/or treatment measures contained in Item 10.g of the Section 401 WQC application:

"Silt curtains shall be installed before in-water work begins and will remain in place until the water returns to pre-construction condition. Water quality monitoring will be conducted before and during the activity. Post construction may be conducted depending on test results and approval from DOH Clean Water Branch."

The following is the BMPs Plan submitted with the Applicant's Section 401 WQC application:

BEST MANAGEMENT PRACTICES PLAN
Special Project R18-96 Repair Bulkhead K12
Fleet and Industrial Supply Center, Pearl Harbor, Hawaii
May 2002

1. **Site Characterization:**
   a. Bulkhead K12 was constructed in 1942. The bulkhead was built to keep the earth fill from sliding into the navigable waters of Pearl Harbor. The northern end is adjacent to Hotel Pier. The western and southern sides (land side) of K12 are paved parking areas. The water depth in the area is approximately 63 feet mean lower low water (MLLW). (Datum MLLW = 100 feet). A recent underwater survey indicated that the area appears to be biologically depauperated compared to most other areas within Pearl Harbor (i.e., fewer different species and reduced total numbers and total biomass of marine organisms). The bulkhead is currently in need of repair. Settlement has occurred along the bulkhead, creating hazardous conditions at the site. Various platforms are moored along bulkhead K12 (see photographs).

2. **Construction Sequence**: The construction sequence is anticipated to be as follows:
   a. install control measures. Demolish existing asphalt concrete pavement. Remove construction debris from project site.
   b. Stabilize the soil at the 70 feet section of K12 adjacent to Hotel Pier.
   c. Install new steel sheet pile in front (outboard) of existing sheet pile (maximum distance of five feet).
   d. Excavate soil and install new steel sheet pile anchor and tie rods at the 70 feet section adjacent to Hotel Pier. Install tie rods along the remaining 450 feet of the new steel sheet pile.
   e. Place fill material between existing and new steel sheet piles.
   f. Reconstruct the asphalt pavement adjacent to the Bulkhead K12.

3. **Construction Methods:** The new steel sheet pile will be driven by a crane mounted on a barge. Soil will be excavated using a backhoe. Soil stabilization will be done by either the mechanical in situ mixing of soil with cementitious materials using a hollow stem mix tool or mixing of soil with cement grout through a high-pressure nozzle. Fill material will be placed between the existing and new steel sheet piles by tremie. The lower end of the tremie shall be kept immersed in the fill material. The reconstruction

of the asphalt concrete pavement will be done by standard construction equipment for such activities.

4. Characteristics of the Discharge and Potential Pollutants Associated with the Proposed Construction Activity

a. The "engineered" fill material will consist of a mixture of expansive material, cement, fly ash, pozzalan, admixtures and water.

5. Proposed Control Measures or Treatment.

a. In-Water Best Management Practices (BMP):

(1) A silt curtain will be in place before the start of in-water work to contain turbidity to adjacent waters. The silt curtains will remain in place until completion of the in-water work and when the water has returned to pre-construction conditions.

(2) All fill material to be placed into the water will be free of any deleterious or objectionable material.

(3) During the performance of the repair work, the Contractor shall institute and enforce procedures to prevent spills and floating debris from entering the water. If such procedures fail, the Contractor shall stop the activity and immediately take corrective action.

(4) No debris shall be allowed to enter the water. The Contractor shall provide suitable positive means of capturing debris during the demolition operations. Holes in the existing sheet piles shall be covered before starting construction work at the bulkhead K12.

(5) Jetting for pile driving will not be allowed.

(6) Construction dewatering effluent will not be discharged into the harbor directly or indirectly without first obtaining the National Pollution Discharge Elimination System permit.

b. On-Land Best Management Practices (BMP):

(1) Burn off of ground cover and burning as a means of disposal will not be allowed.

(2) For protection of erodible soils, the earthwork will be planned and conducted to minimize the duration of exposure of unprotected soils. Holes in the existing

steel sheet piles shall be covered to prevent any soil/debris from entering the harbor.

(3) Temporary protection of erodible soils will be accomplished by mechanical retard and control of the rate of runoff from the construction site. This includes construction of diversion ditches, benches, berms, and use of silt fences and straw bales to retard and divert runoff to protect drainage courses. Erosion control measures shall be maintained throughout the construction period.

(4) Adequate erosion and storm water runoff control measures will be applied to prevent the runoff form onsite material staging and stockpiling areas into the harbor.

(5) Solid wastes will be picked up and placed in covered containers, which are regularly emptied. No food will be prepared, cooked or disposed on the project site. Site contamination will be prevented when handling and disposing waste. Waste generated by the Contractor's operation will be controlled and disposed.

(6) Materials will be stored and staged in a manner to prevent the discharge of debris into the harbor.

(7) Except in areas to be cleared, trees and shrubs will not be removed, cut, defaced, injured or destroyed.

(8) Oil or other hazardous substances will be prevented from entering the ground, drainage areas, or the harbor. All temporary fuel oil or petroleum storage tanks will be surrounded with secondary containment to prevent soil contamination. The secondary containment shall be of sufficient size and strength to contain the contents of the tanks if a spill or leak occurs. The Contractor will have on site a spill kit, which includes absorbents, 55 gallon drums, pump, oil solvents, personnel protection equipment, etc. The Contractor will provide training to his personnel regarding oil/hazardous material spill.

(9) In the unexpected event of an oil spill, the Contractor will contain and clean-up all spills caused by his operations. Oil absorbent booms and sheets will be deployed immediately. The Resident Officer In Charge of Construction (ROICC) PEARL will be notified of all oil or hazardous material spills that occur.

During normal working hours, the ROICC PEARL Construction Management Engineer (474-3220 ext. 0), the Deputy Navy On-Scene Coordinator, Pearl Cowan, (471-4785) during the day or (574-5042, pgr) or Alternate Deputy Cynthia Pang, (473-4689) or (569-5357, pgr) will be notified. The federal fire department (FFD) shall be notified at 471-7117 for all spills. After working

hours, the ROICC PEARL Duty Officer will be contacted at cellular phone # 226-1873, ROICC beeper # 577-1798, or through the PWC trouble desk at 471-8481.

If the spill equals or exceeds the regulatory reportable quantities, the Contractor shall verbally notify the following agencies:

- National Response Center (NRC) at 800-424-8802
- Hawaii State Emergency Response Commission (HSERC) / Department of Health Hazard Evaluation and Emergency Response (HEER) at 586-4249 (days), 247-2191 (24 hrs) or 586-7537 (fax)
- Local Emergency Planning Committee (LEPC) at 523-4121 (days), 911 (24 hrs), or 524-3439 (fax)
- Notify the NAVSTA Fire Chief 574-5042 (pgr), 474-2222 or the Alternate Deputy Navy On-Scene Coordinator (NOSC) Cynthia Pang at 473-4689 or 569-5357 (pgr)

For spills, which exceed the regulatory reportable quantities, written notifications must also be provided to the following with a copy to NAVREGHI Code NO1ERM (517 Russell Ave. Suite 110, Pearl Harbor, HI 96860-4884):

1. Navy Spill Message

2. Hawaii State Department of Health HSERC/HEER
   919 Ala Moana Blvd., Rm. 206
   Honolulu HI 96814-4912
   Attn: EPCRA Data Manager

3. Oahu Civil Defense LEPC
   650 South King St.
   Honolulu HI 96813

(10) Oil Contaminated Soil: Excess contaminated soil that may be transported off site for disposal must be sampled and tested to ensure compliance with the State of Hawaii, Department of Health (SOHDOH) and disposal facility guidelines and permit requirements. Petroleum contaminated soil disposed of at a SOHDOH permitted facility also requires generator certification that the soil is not a hazardous waste.

(11) Fueling and lubricating of equipment and motor vehicles will be conducted off Government property to the maximum extend possible. Such activity will be conducted in a manner to protect against spills and evaporation. Lubricants and excess oils will be disposed at a licensed disposal site.

(12) Dust will be kept down at all times, including nonworking periods. Dry power brooming will not be permitted. Instead, vacuuming, wet mopping, wet sweeping, or wet power brooming will be used. Air blowing will be permitted for cleaning nonparticulate debris such as steel reinforcing bars except as otherwise specified. Only wet cutting will be permitted for cutting concrete blocks, concrete, and bituminous concrete. Bags of cement, concrete mortar or plaster will not be unnecessarily shaken.

6. Monitoring

a. The Contractor will conduct daily visual inspections of BMPs in place. If a plume is observed outside of the silt curtain, which is caused by the construction activity, the Contractor will stop the activity causing the problem and will take immediate corrective action before resuming the activity.

b. Water quality testing will be conducted before, during and after construction (see Water Quality Monitoring plan).

EVALUATION:

Item 2 (Construction Sequence) of the May 2002 BMPs plan requires the contractor to:

"a. Install control measures. Demolish existing asphalt concrete pavement. Remove construction debris from project site.

b. Stabilize the soil at the 70 feet section of K12 adjacent to Hotel Pier.

c. Install new steel sheet pile in front (outboard) of existing sheet pile (maximum distance of five (5) feet).

d. Excavate soil and install new steel sheet pile anchor and tie rods at the 70 feet section adjacent to Hotel Pier. Install tie rods along the remaining 450 feet of the new steel sheet pile.

e. Place fill material between existing and new steel sheet piles.

f. Reconstruct the asphalt pavement adjacent to the Bulkhead K12. "

In the letter, dated January 29, 2003, the CWB informed the PACDIVNAVFACENGCMD that the submitted BMPs Plan (dated May 2002) is general in nature and requested PACDIVNAVFACENGCMD to "describe location of the BMPs measures to be used to provide best degree of control or treatment for the potential storm water discharges from the soil stabilization work (at the northern end of K12 adjacent to the Hotel Pier) and designated contractor staging area." In response, the PACDIVNAVFACENGCMD asked the CWB to "[P]lease see previously submitted (part of the WQC application) On-Land

Best Management Practices (BMP) on Page 3 of the Best Management Practice Plan dated 2002." We noted that:

1. The PACDIVNAVFACENGCMD shall submit a site-specific BMPs that would have included "procedures" and "suitable positive means" to properly address these concerns.

   There is no indication in item 2.a of the BMPs plan on exactly what type of the "control measures shall be installed" before any construction activities will take place. Based on the PACDIVNAVFACENGCMD's response, it is only logical to assume that only those measures listed as the "On-Land Best Management Practices (BMP)" would be applied or installed at this stage and the silt curtain will not be installed until such a time prior to the initiation of the in-water work. There is no assurance that the proposed "on-land" BMPs measures are capable of controlling/treating the potential "on-land" construction activities related pollutants from entering the State waters. For example, there is no indication on exactly what type of the listed on-land BMPs measures will be used? The typical section and the specification (i.e., material for the silt fence) of the selected BMPs measures at a specific location were also not provided? In particular, there is no indication on how deep would the contract be required to stabilize the soil and how would this relate to the BMPs measures to be selected, located, installed, and maintained? As noted in the BMPs plan and verified during the site visitation, there are "holes" in the existing sheet piles fronting this 70 feet section (and the entire length of the wharf). Since the silt curtain will not be installed until prior to initiate the in-water work (see item 5.a of the BMPs Plan), the on-land BMPs measures to be selected should be capable of not only preventing the demolish and excavation activities associated soil erosion, but, should also be capable of providing treatment to the construction activity related storm water runoff and capable of preventing the pressured cement grout from spilling into State waters. Item 5.a(3) of the BMPs plan stated that "[D]uring the performance of the repair work, the Contractor shall institute and enforce procedures to prevent spills and floating debris from entering the water. If such procedures fail, the Contractor shall stop the activity and immediately take corrective action." Item 5.a(4) for the BMPs plan further stated that "[N]o debris shall be allowed to enter the water. The Contractor shall provide suitable positive means of capturing debris during the demolition operations. Holes in the existing sheet piles shall be covered before starting construction work at the bulkhead K12." Although there is no mention on what types of "procedures" or "suitable positive means" the contractor is required to provide "procedures" or "suitable positive means", it could also be interpreted that the PACDIVNAVFACENGCMD does have major concerns on the adequacy of the "general" "on-land" BMPs measures proposed in the submitted BMPs plan. Therefore, the PACDIVNAVFACENGCMD shall submit a site-specific BMPs plan that would have included "procedures" and "suitable positive means" to properly address these concerns.

2. It should be more appropriate to require the installation of the required silt curtain

between the step 2.b and 2.c to avoid confusion.

After soil is stabilized at this 70-feet section (item 2.b) of the wharf K12, the contractor is then required to "[I]nstall new steel sheet pile in front (outboard) of existing sheet pile (maximum distance of five feet)." Although item 5.a(1) [in-water BMPs] of the BMPs plan requires that "[A] silt curtain will be in place before the start of in-water work to contain turbidity to adjacent waters. The silt curtains will remain in place until completion of the in-water work and when the water has returned to pre-construction conditions." Therefore, it should be more appropriate to require the installation of the required silt curtain between the step 2.b and 2.c to avoid confusion.

3. The new epoxy-coated steel sheet piles shouldn't be considered as the "initial" water tight containment devices fro water pollution control purposes. And, the silt curtain shouldn't be considered as the secondary containment.

   The CWB has further requested in the letter of January 29, 2003 that the PACDIVNAVFACENGCMD should describe what types of "water tight" form will be used for "tremie" processes (fill material and concrete pile caps). The PACDIVNAVFACENGCMD responded that "Fill will be placed in between the new and existing steel sheet piles. The new steel pile will contain the fill material. Additionally, a silt curtain will be in place during the in water activity; therefore, acting as a secondary containment. . ."

   We note that based on experiences observed during the two (2) previous site visitation trips [to both Wharf 373 (WQC 0000533) and Wharf 374 (WQC 0000520], there are holes in the new sheet piles installed. These holes are located at seal level, therefore, allowing the direct water exchange between the Harbor waters and water contained within the new sheet piles constantly. The new sheet piles may hold the engineered fill material together during its application, but, it does not have the capability of "contain" and "isolate" the water exchange within and outside the sheet piles at any time, including the turbid displacement water from the application of the tremie concrete. Therefore, the new sheet piles should not be considered as the primary water-tight water pollution control device because it doesn't have the capability of "properly isolate and confine the construction activity(ies) and to contain and prevent any potential pollutant(s) discharges from adversely impacting the State waters." The proposed full depth silt curtain is considered as the primary BMPs measure provided by the PACDIVNAVFACENGCMD for this project.

4. Detailed construction sequence is needed for the installation of the silt curtain, new sheet piles, and the placement of the fill material.

   Item 5.a(1) requires that "**[A] silt curtain** will be in place before the start of in-water work to contain turbidity to adjacent waters. The **silt curtains** will remain in place until completion of the in-water work and when the water has returned to pre-

construction conditions." Based on items 2.c and 2.d of the BMPs plan, the contractor is required to "[I]nstall new steel sheet pile in front (outboard) of existing sheet pile (maximum distance of five feet). There is no indication whether the silt curtain(s) and the new sheet piles will be installed/constructed in one single phase or in multi-phases for entire 520-feet. Item 2.d of the BMPs plan requires the contractor to "[E]xcavate soil and install new steel sheet pile anchor and tie rods at the 70 feet section adjacent to Hotel Pier. Install tie rods along the remaining 450 feet of the new steel sheet pile" and item 2.e requires the contractor to "[P]lace fill material between existing and new steel sheet piles." And, again, there is no indication whether the fill material will be placed in a single phase or multi-phases. If the PACDIVNAVFACENGCMD intended to install the silt curtain, driving new sheet piles, and the placement of the fill material in one single action, then, the BMPs measures, receiving water quality monitoring stations and frequencies may be acceptable. It the PACDIVNAVFACENGCMD will construct the project is a multi-phases, then, the adequacy of the BMPs measure, receiving water quality monitoring stations and frequencies proposed for this project needs to be re-evaluated.

5. Previous experience learned from the construction of Wharf 373 WQC 0000533), during the bidding process, the Navy changed scope of the construction work per request from the selected bidder and additional fill material was placed outside the new sheet piles by constructed another temporary sheet pile to the new sheet piles. The Navy did not inform the CWB according to the Section 401 WQC standard condition until later date. Modification to the scope of project shall be submitted to CWB when the changes occurred.

6. During one of the recent site inspections, the Navy staff requested and forwarded the evidential photographs taken by the CWB staff to the Navy security and was not returned to the CWB until a week later. On the other case, the CWB staff was told not to take any pictures (Wharves H5 and K12) for file records. We note that CWB staff conducting site inspection for the purposes of either to expedite the Navy's application for an NPDES permit or a WQC or to perform a compliance investigation. The facilities are existing, the sites are outdoors, there are no secrets involved. Should the Navy staff feel uncomfortable on what pictures were taken by the CWB staff, he or she shall verify the pictures on-site without holding on to the pictures. By applying for and accepting this Section 401 WQC, the PACDIVNAVFACENGCMD shall agree that the Department may conduct routine inspection of the construction site, taking color photographs, and to sample any discharges or effluent in accordance with HRS, Section 342D-8.

7. The PACDIVNAVFACENGCMD shall conduct post construction receiving water sampling and taking unless otherwise waived by the Director in writing.

Therefore, the following requirements are deemed necessary and shall constitute part of the Section 401 WQC conditions.

* The PACDIVNAVFACENGCMD shall submit:

  A site-specific Best Management Practices (BMPs) plan that contains the "procedures" and "suitable positive means" provided by the Contractor selected which shall, at a minimum, including the following information:

  (A) On-land BMPs measures selected for the soil stabilization, demolition, and pavement construction to prevent demolish and excavation associated soil erosion; to provide treatment for the construction activity related storm water runoff; to capture construction related debris; and to prevent the pressured cement grout from spilling into State waters.

  (B) Typical sections, and locations for the BMPs measures selected in (A) , above.

  (C) Detailed information on the in-water construction work, including the construction sequence, construction methods.

* The PACDIVNAVFACENGCMD shall submit final construction drawings, if deviate from the drawings on file.

In addition, the following standard Section 401 WQC conditions also deemed applicable to this project:

* This Section 401 WQC may be revoked when any of the following is identified:

  (a) The PACDIVNAVFACENGCMD shall comply with all applicable new water quality standards as adopted by the Department. In any case where:

  (i) Water quality standards applicable to the waters into which the activity may discharge are subsequently established before the activity is completed; or

  (ii) The Director determines that the activity is violating new water quality standards.

  The CWB will notify the PACDIVNAVFACENGCMD of the violation. The PACDIVNAVFACENGCMD shall cease the violation within one hundred eighty days of the date of the notice. If the PACDIVNAVFACENGCMD fails within one hundred eighty days of the date of the notice to cease the violation, the Director may revoke this certification, at the Director's discretion; and

  (b) The Director determines that the discharge(s) from the activity is violating with any existing water quality standards or condition of this Section 401 WQC, the CWB shall notify the PACDIVNAVFACENGCMD of the violation. The PACDIVNAVFACENGCMD shall cease the violation within seven (7) days of the

date of the notice. If the PACDIVNAVFACENGCMD failed within seven (7) days of the date of the notice to cease the violation, the Director may revoke this certification, at the Director's discretion.

This action shall not preclude the Director from taking other enforcement action authorized by law.

Written notification by the CWB under this section is complete upon mailing or sending a facsimile transmission or electronic mailing of the document or actual receipt of the document by PACDIVNAVFACENGCMD.

* The PACDIVNAVFACENGCMD shall:

(1) Comply and shall also require the contractor(s) to comply with applicable specifications, schedules, procedures, pollution control/ treatment measures plan, and any other project construction related requirements, information contained in the Section 40 WQC application, dated May 28, 2002, subsequent submittal (No. 5090.A7 Ser ENV1811/353) dated March 20, 2003 and information required in item 3.c(1) of this WQC.

(2) Comply with the "BEST MANAGEMENT PRACTICES PLAN, Special Project R18-96 Repair Bulkhead K12, Fleet and Industrial Supply Center, Pearl Harbor, Hawaii, May 2002" and subsequent revisions, if any, accepted by the Director in writing.

(3) Conduct or contract with a qualified laboratory/environmental consultant to conduct the "Water Quality Monitoring Plan for Special Project R18-96 Repair Bulkhead K12, Fleet and Industrial Supply Center, Pearl Harbor, Hawaii, May 2002" and the QA/QC protocol as required in item 3.c(1).

Test methods promulgated in 40 CFR Part 136 effective on July 1, 1998, and, when applicable, the chemical methodology for sea water analyses (see HAR, Section 11-54-10) shall be used. The detection limits of the test methods used shall be equal to or lower than the applicable water quality standards as specified in HAR, Chapter 11-54. For situations where the applicable water quality standard is below the detection limits of the available test methods, the test method which has the detection limit closest to the applicable water quality standards shall be used. If a test method has not been promulgated for a particular parameter, the applicant may submit an application through the Director for approval of an alternate test procedure by following 40 CFR §136.4.

The Director may, at the Director's own discretion or upon written request from the PACDIVNAVFACENGCMD and on a case-by-case basis, require the PACDIVNAVFACENGCMD to modify the monitoring frequency(ies) or change

the sampling locations, as appropriate. If a written request is submitted for the reduction of monitoring frequency(ies), it shall be accompanied by an assessment of monitoring results which shall clearly demonstrate that the project construction activity related discharge has fully complied with the applicable water quality standards.

Water chemistry monitoring results shall be submitted to the CWB as soon as it becomes available. Only the results from the representative sample shall be acceptable.

The PACDIVNAVFACENGCMD shall conduct post construction receiving water sampling and taking unless otherwise waived by the Director in writing.

Color photographs shall be taken before and after the completion of the Wharf K12 bulkhead repair construction work. A benchmark shall be established prior to the commencement of any construction work. The benchmark shall be established to allow the comparison of the site(s) conditions before and after the construction. Copies of the color photographs taken should note the date and time the photos were taken. Photographs taken before the project construction shall be submitted to the CWB prior to the commencement of the project construction. Photographs taken after the construction shall be submitted to the Department within two (2) weeks after the completion of the construction project.

(4) Ensure that all "discharges" associated with the proposed construction activities are conducted in a manner that will comply with "Basic Water Quality Criteria Applicable to All Waters" as specified in HAR, Section 11-54-04.

(5) Ensure that all material(s) placed or to be placed in State waters are free of waste metal products, organic materials, debris and any pollutants at toxic or potentially hazardous concentrations to aquatic life as specified in HAR, Section 11-54-04(b).

(6) Ensure that silt curtain(s) and/or other appropriate and effective silt containment or treatment device(s) will be properly deployed prior to the commencement of any construction work; be properly maintained throughout the entire period of the construction work; and not be removed until the construction work is completed and the condition in the affected area(s) has returned to its pre-construction condition.

(7) Ensure that construction debris is contained and prevented from entering or reentering State waters.

(8) Ensure that all temporarily constructed structures, including the silt containment device(s) deployed or other similar structures constructed, are removed following the completion of the project construction and upon the verification that the affected marine bottoms and water column have returned/restored to its pre-

construction condition.

(9) Immediately cease the portion of the construction work if water quality monitoring or daily inspection or observation result(s) indicates that noncompliance to HAR, Section 11-54-04(a) or Section 11-54-04(b) will occur or is occurring. The construction activity shall not resume until adequate mitigative measures are implemented and appropriate corrective actions are taken and concurred with by the Department. The PACDIVNAVFACENGCMD shall not hold the Department responsible for any damages or costs incurred due to the cease of the construction works.

(10) Immediately report to the CWB of any spill(s) or other contamination(s) that occurs at the project site.

(11) (a) Invite the Department's representative(s) to attend the partnering, pre-construction or any other similar type of meeting that is established for the proposed construction project.

(b) Notify the CWB [via telephone no. (808) 586-4309] at least three (3) working days before any construction work is to begin.

(c) Notify the CWB within 14 days after the completion of the proposed construction activity.

(12) Ensure that:

(a) Erosion and sediment control measures are in place and functional before earth moving operations begin.

(b) Temporary soil stabilization be applied on areas that will remain unfinished for more than 30 calendar days.

(c) Permanent soil stabilization be applied as soon as practicable after final grading.

The PACDIVNAVFACENGCMD shall ensure that the contractor(s) maintains, at the construction site or in the nearby field office, a record that item 3.d(14) of the Section 401 WQC requirements have been fully complied with.

(13) Ensure that all areas impacted, either directly or indirectly, by the project construction activities are fully restored.

* The PACDIVNAVFACENGCMD shall review and update the effectiveness and adequacy of the "Water Quality Monitoring Plan for Special Project R18-96 Repair Bulkhead K12, Fleet and Industrial Supply Center, Pearl Harbor, Hawaii, May 2002" and the QA/QC protocol as required in item 3.c(1), the implemented site-specific best

management practices, and/or other environmental protection measures contained in the "BEST MANAGEMENT PRACTICES PLAN, Special Project R18-96 Repair Bulkhead K12, Fleet and Industrial Supply Center, Pearl Harbor, Hawaii, May 2002" and subsequent revisions, if any, accepted by the Director in writing. The PACDIVNAVFACENGCMD shall modify the applicable monitoring and assessment plan, and site-specific BMPs and/or environmental protection measures contained in site-specific BMPS plan upon request or when instructed by the Director.

Any change(s) to the implemented site-specific BMPs measures, applicable monitoring and assessment plan or correction(s) or modification(s) to information already on file with the Department shall be submitted to the CWB, for review and comment, as such change(s), correction(s) or modification(s) arise. The PACDIVNAVFACENGCMD shall properly address all comment(s) and/or concern(s) to the Director's satisfaction before such change(s), correction(s) or modification(s) become effective.

* By applying for and accepting this Section 401 WQC, the PACDIVNAVFACENGCMD agrees that the Department may conduct routine inspection of the construction site, taking color photographs, and to sample any discharges or effluent in accordance with HRS, Section 342D-8.

* Construction debris, vegetation and/or dredged material removed from the project site shall be disposed at the upland State or County approve landfill. A Solid Waste Disclosure Form for Construction Sites shall be completed and returned to the Department's Office of Solid Waste Management when upland disposal is warranted. No construction material or construction-related materials shall be stockpiled, stored or placed within the construction limits or in ways that will disturb or adversely impact the aquatic environment;

* There shall be no discharge of any wash water into State waters;

* The PACDIVNAVFACENGCMD shall obtain shall obtain a National Pollutant Discharge Elimination System (NPDES) permit for any discharge(s) that is regulated pursuant to CWA, Section 402, and HAR, Chapter 11-55 prior to the commencement of such a discharge. The PACDIVNAVFACENGCMD shall also obtain an NPDES permit to discharge storm water associated construction activity should the project construction activity involves the total land disturbance area is one (1) acre or more.

* Return flow or runoff, if any, from the dredged spoils dewatering process or from the stockpiling site shall be contained on land and not be allowed to enter State waters.

8. EXPECTED COMMENCEMENT AND TERMINATION DATES:

According to Item 9. of the application:

a. The estimated start and end date of the repair project is August 2002 and August 2003. An updated project construction schedule shall be submitted 30 calendar days before the start of construction.

b. It is estimated that the date of discharge will begin in November 2002 and end in April 2003. The exact discharge date will be provided at least three (3) working days before the start of the discharge.

EVALUATION:

The estimated start and end date will be changed pending the processing of this Section 401 WQC through the public participating process. However, based on item 9.a of the application, the entire project will take approximately one (1) year to complete. Based on item 9.b of the application, the discharge (in-water work) will last for six (6) month. Therefore, the following requirements are recommended:

"c. This Section 401 WQC:

(1) Shall become effective when the PACDIVNAVFACENGCMD:

(a) Submitted, within one (1) year of the date of this letter, to the CWB the:

(i) Information on the selected general contractor. Information shall, at a minimum, include the general contractor's legal name, address, contact person's name and position, telephone and FAX numbers;

(ii) A Material Safety Data Sheet (MSDS) of the "expansive material;"

(iii) An updated construction schedule;

(iv) A site-specific Best Management Practices (BMPs) plan that contains the "procedures" and "suitable positive means" provided by the Contractor selected which shall, at a minimum, including the following information:

(A) On-land BMPs measures selected for the soil stabilization, demolition and pavement to prevent demolish and excavation associated soil erosion; to provide treatment for the construction activity related storm water runoff; to capture construction related debris; and preventing the pressured cement grout from spilling into State waters.

(B) Typical sections, and locations for the BMPs measures selected in (A) , above.

(C) Detailed information on the in-water construction work, including the construction sequence, construction methods.

(v) An acceptable written Quality Assurance (QA) and Quality Control (QC) protocol as required in the "**Water Quality Monitoring Plan (WQMP) for Special Project R18-96, Repair Bulkhead K12 Fleet and Industrial Supply Center, Pearl Harbor, Hawaii, May 2002."**

(vi) Final construction drawings, if deviate from the drawings on file; and

(b) A written acceptance letter from the from the Director after all related concern(s) and comment(s) are properly addressed to the Director's satisfaction.

The Director shall have 30 days to review the information and provide the comments and concerns, if any.

(2) Shall expire two (2) years from the effective date of the Section 401 WQC, or until the applicable water quality standards (WQS) are revised or modified, or when the DA NWP #3 is modified, revoked, suspended, or expired, or the TMDL Report and the mandatory implementation of the TMDL Plan for Pearl Harbor watershed is established by the Department and approved by the U.S. Environmental Protection Agency (EPA), or when the project construction is completed, whichever is earliest. If the applicable State WQS is revised or modified during the two-year period and the discharge activity complies with the revisions or modifications, or the discharge activity complies with TMDL Report and the mandatory implementation of the TMDL Plan established by the Department and approved by the EPA, this Section 401 WQC shall continue to be valid for the remainder of the two-year period.

The Director, upon the written request from the PACDIVNAVFACENGCMD, may administratively extend the expiration date of this Section 401 WQC only when the written request is accompanied with appropriate color documentation demonstrating that the project is in fact under physical construction and the purpose of extending the expiration date is to allow the contractor to complete the project construction.

9.a. METHODS AND MEANS OF MONITORING WATER QUALITY AND CHARACTERISTICS OF DISCHARGE (INCLUDING TREATMENT OPERATIONS AND CONTROL):

The applicant stated in Item 11 of the WQC application that:

a. Description of the methods and means being used or proposed to monitor the quality and characteristics of the discharge

The Contractor shall conduct water quality monitoring to ensure that water quality standards are not being violated during the in-water activity (see attached water quality monitoring plan).

b. Description of the methods and means being used to monitor/maintain all pollutant control measures

The Contractor shall conduct daily visual observations of best management practices (BMP). The Contractor shall take immediate corrective action if a breach in the control measures is observed. If the Contractor observes a plume outside of the silt curtains, the Contractor shall stop the activity that is causing the plume. The Contractor shall take immediate corrective action. The Contractor shall resume the activity after the problem is fixed.

c. Reporting requirements

Test results will be sent to the DOH Clean Water Branch (CWB) on a monthly basis. Laboratory reports and a summary of the test results will be sent to the DOH CWB by mail.

d. A narrative of how the monitoring results will be used to demonstrate whether or not the project construction activity was in compliance with the applicable State water quality standards

Water quality test results shall be compared to the pre-construction results to evaluate the project's effects during the construction activity.

Evaluation:

a. As describe in Section 5 of this ISE, Pearl Harbor is classified by the Department as "Class 2, Inland Waters" for "Pearl Harbor Estuary" in accordance with HAR, §§11-54-03(b)(2) and 11-54-05.2(d)(2). Pearl Harbor is also listed by the Department as "Water Quality Limited Waters" for nutrients, suspended solids, turbidity and polychlorinated Biphenyls (PCBs) in accordance with Section 303(d) of the "CWA". Pearl Harbor is listed as "high" priority for implementing Total Maximum Daily Load (TMDL) mitigative measures in accordance with CWA, subsection 303(e). The affected marine bottom ecosystem is classified by the Department as "Class II, Marine Bottom Ecosystem" for "Reef Flats and Reef Communities" in accordance with HAR, §§11-54-03(d)(2) and 11-54-07(e)(2)(B)(i). Therefore, statement specified in item 11.a of the WQC application which requires "[T]he Contractor shall conduct water quality monitoring to ensure that **water quality standards** are not being violated during the in-water activity (see attached water quality monitoring plan" may not totally be appropriate. However:

(1) It is not anticipated that PCBs will be involved in the project construction activities, unless the unexpected spills from the adjacent industrial activities/facilities.

(2) When the ambient receiving State water quality meets applicable State water quality criteria (both the basic and specific criteria), the PACDIVNAVFACENGCMD shall ensure that the project construction activities related discharges will not cause the applicable State water quality criteria to be violated.

(3) Although temporary increasing in turbidity level is expected and a full depth silt

curtain is proposed to isolate and confine the area immediately adjacent to the proposed sheet piles construction and fille material placement, any visible floating debris, oil, grease, scum, other floating materials, or objectionable color, or turbidity plume, detected outside the confined/isolated areas constitutes violation to HAR, Subsection 11-54-04(a) requirements.

When the ambient receiving State water quality does not meet applicable State water quality criteria, the PACDIVNAVFACENGCMD shall cease the portion of the construction activity temporarily when turbidity monitoring result collected at the impact stations (2 & 3) is 10% (or 10.0 ntu, whichever is lower) or more higher than the turbidity monitoring result collected at the control stations (100 m offshore) which represents the ambient water quality. The PACDIVNAVFACENGCMD shall not resume the construction operations until an appropriate and effective measure, acceptable to the Director, can be properly implemented or until the water quality has returned to its preconstruction condition. The PACDIVNAVFACENGCMD shall not hold the Department responsible for any damages or costs incurred due to the temporary cessation of the construction operations. This action shall not preclude the Department from taking enforcement action authorized by law.

b. Only the sampling results from the representative samples will be acceptable and be used to comply with the State WQS and this WQC conditions. In addition to the information required in the monitoring plan, the PACDIVNAVFACENGCMD shall also indicate in its field notes the construction activities, wind direction, harbor current direction, rain information, Halawa Stream flow information.

b. AN APPLICABLE MONITORING AND ASSESSMENT PLAN CONTAINED IN THE May 23, 2002 APPLICATION HAVE BEEN PROVIDED.

YES X NO _____

EVALUATION: Acknowledged

The Applicable Monitoring and Assessment Plan shall, at a minimum, include the following:

Water Quality Monitoring Plan
for
Special Project R18-96 Repair Bulkhead K12
Fleet and Industrial Supply Center, Pearl Harbor, Hawaii
May 2002

1. **Purpose**: A water quality monitoring plan is needed to ensure that the water quality of the receiving waters is not violated during the proposed construction activity.

2. **Background**: Bulkhead K12 was constructed in 1942. The bulkhead was built to keep

the earth fill from sliding into the navigable waters of Pearl Harbor. The northern end is adjacent to Hotel Pier. The western and southern sides (land side) of K12 are paved parking areas. The water depth in the area is approximately 63 feet mean lower low water (MLLW). (Datum MLLW = 100 feet). The bulkhead is currently in need of repair. Settlement has occurred along the bulkhead, creating hazardous conditions at the site. Additionally, various platforms are moored along bulkhead K12.

3. **Project Description**: The proposed project is a repair project. Repair work involves installing new steel sheet piles in front (outboard) of the existing deteriorated sheet piles. A portion of the bulkhead will be reinforced by soil stabilization. The space between the existing and the new steel sheet piles will be filled. The asphalt concrete pavement adjacent to the new bulkhead will be reconstructed.

4. **Water Quality Monitoring (WQM) Plan**

   The Contractor shall conduct daily visual observations to ensure that control measures are in place and functioning properly. If a plume is observed outside of the silt curtain, which is caused by the construction activity, the Contractor shall stop the activity that is causing the problem and shall take immediate corrective action. Activity shall resume after problem is corrected.

   The Navy's field inspector shall also conduct daily visual inspections. It the inspector observes a breach in the control measures or observes a plume outside the silt curtains, he shall notify the Contractor immediately. Upon notification, the Contractor shall take immediate corrective action.

   In addition to daily visual observations, the Contractor shall conduct water quality monitoring to ensure that water quality standards are not violated during the in-water work of the repair project. Pre-construction, during construction and post-construction sampling/testing will be conducted. Parameters to be tested are turbidity, total suspended solids and pH. A field meter will be used to monitoring parameters listed or the appropriate EPA test methods will be used. Quality assurance/quality control shall be in accordance with each appropriate method. There will be two control stations and two monitoring stations as shown on the attached drawing. The two control stations shall be located away from the construction activity. The two monitoring stations will be located approximately one meter outside of the silt curtain. The following frequencies is based on the "Monitoring Guidelines for Section 401 Water Quality Monitoring Projects" issued by the State Department of Health, Clean Water Branch.

   Pre-construction: Daily sampling for two weeks shall be conducted during the pre-construction phase. Results of the pre-construction monitoring will be used as the baseline for comparing results obtained during the construction and post-construction phase.

   During construction: It is anticipated that the in-water work will take approximately eight months. As such, sampling will be three (3) times per week, while in-water work is on going. Results will be compared to the pre-construction test results to determine

whether or not the construction activity is in compliance with the Pearl Harbor water quality standards.

Post-construction: Post construction sampling will be done once, two weeks after construction completion.

During the water sample collection, the following information shall be recorded:

a. Date and time.
b. Weather conditions (i.e., rainy, sunny, cloudy, etc.)
c. Type of construction activity occurring and the construction management techniques being used to prevent/minimize water quality impacts.
d.Any adjacent operations, which may have occurred and may have contributed to receiving water condition (e.g., silt suspension due to propeller of a passing vessel).

5. **Reporting**: The contractor shall submit a report summarizing the results, along with the laboratory sheets and information obtained during the water sample collection, to the ROICC CME. The ROICC CME will forward to ENV1811 for submittal to the State Department of Health Clean Water Branch (DOH CWB) on a monthly basis. Two weeks after a month of sampling/testing has been completed, the report will be sent to the DOH CWB at the following address:

State of Hawaii
Department of Health
Environmental Management Division
Clean Water Branch
919 Ala Moana Boulevard, Room 301
Honolulu, Hawaii 96814-4920

a. A QA/QC protocol was not submitted.

b. It must be the representative sample.

c. The PACDIVNAVFACENGCMD shall invite CWB to the project site during concrete pouring PACNAVFACENGCOM's monitoring proposal is deemed acceptable with the incorporation of the following standard and specific Section 401 WQC conditions:

* The applicant shall conduct or contract with a qualified laboratory/environmental consultant to conduct the applicable monitoring and assessment plan as proposed in Attachment 3 of the "Site-Specific Environmental Protection Plan (EPP), dated January 2002."

  Test methods promulgated in 40 CFR Part 136 effective on July 1, 1998, and, when applicable, the chemical methodology for sea water analyses (see HAR, §11-54-10) shall be used. The detection limits of the test methods used shall be equal to or lower than the applicable water quality standards as specified in HAR, Chapter 11-54. For situations where the applicable water quality standard is below

the detection limits of the available test methods, the test method which has the detection limit closest to the applicable water quality standards shall be used. If a test method has not been promulgated for a particular parameter, the applicant may submit an application through the Director for approval of an alternate test procedure by following 40 CFR §136.4.

The Director may, at the Director's own discretion or upon written request from the PACDIVNAVFACENGCMD and on a case-by-case basis, require the PACDIVNAVFACENGCMD to modify the monitoring frequency(ies) or change the sampling locations, as appropriate. If a written request is submitted for the reduction of monitoring frequency(ies), it shall be accompanied by an assessment of monitoring results which shall clearly demonstrate that the project construction activity related discharge has fully complied with the applicable water quality standards.

* Water chemistry monitoring results shall be submitted to the CWB as soon as it becomes available. Only the results from the representative sample shall be acceptable.

* Color photographs shall be taken before and after the completion of the Wharf K-12 repair construction work. A benchmark shall be established prior to the commencement of any construction work. The benchmark shall be established to allow the comparison of the site(s) conditions before and after the construction. Copies of the color photographs taken should note the date and time the photos were taken. Photographs taken before the project construction shall be submitted to the CWB prior to the commencement of the project construction. Photographs taken after the construction shall be submitted to the Department within two (2) weeks after the completion of the construction project.

* The PACDIVNAVFACENGCMD shall conduct post construction receiving water sampling and taking unless otherwise waived by the Director in writing.

10. IN ACCORDANCE WITH THE HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF HEALTH, CHAPTER 11-54, WATER QUALITY STANDARDS, THE APPLICANT HAS PROVIDED A STATEMENT OF ASSURANCE THAT THE PROPOSED ACTIVITY WILL BE CONDUCTED IN SUCH A MANNER WHICH WILL NOT VIOLATE THE BASIC WATER QUALITY CRITERIA APPLICABLE TO ALL WATERS AND THE SPECIFIC WATER QUALITY CRITERIA APPLICABLE TO THE CLASS OF RECEIVING WATERS WHERE THE PROPOSED DISCHARGE(S) WOULD TAKE PLACE.

YES __X___ NO __

OVERALL EVALUATION:

Acceptable. The applicant has properly signed the Certification page as specified in item 17 of the Section 401 WQC application.

11. SUPPORTING DOCUMENTATION SUBMITTED: YES ___X__ NO __

Documents Title	Dated
a. PCN for NWP #3	May, 2002
b. Record of Categorical Exclusion	Feb. 28, 2001
c. Drawings/Specifications	Apr. 29, 2002

EVALUATION:

Acceptable. Supporting documentation are received.

12. INITIAL RECOMMENDATION OF SECTION 401 WATER QUALITY CERTIFICATION:

In accordance with CWA, Section 401(a), HRS, Chapters 91, 92 and 342D, it is recommended that a conditional Section 401 WQC be issued to the PACDIVNAVFACENGCMD for the subject project construction after the public participation procedure through the publication of Public Notice (PN) of Proposed Water Quality Certification in the **Honolulu Star Bulletin**. Public involvement and participation shall play an important role and shall be the main procedure in this individual Section 401 WQC application processing and decision making. Additional information and comments collected during the public comment period will provide the CWB with additional and useful information in determine whether granting a conditional Section 401 WQC for this project construction, as proposed, is appropriate or additional conditions are needed to address public concerns. A draft PN of Proposed Section 401 WQC is attached as attachment A.

If the outcome of the PN indicates that the determination of conditionally granting a Section 401 WQC is appropriate, it is recommended that the final Section 401 WQC shall, at least, include the conditions as proposed in attachment "B" - the proposed Section 401 WQC. The proposed Section 401 WQC is enclosed as part of this ISD to expedite the Section 401 WQC application processing. These conditions are deemed necessary initially based on an evaluation of the Section 401 WQC application and supporting information which are relevant to water quality concerns. Additional conditions can and shall be added to properly address all comments or concerns raised during the public comment period.

With the incorporation of these recommended conditions, there is reasonable assurance that the subject activity will not violate the applicable water quality standards and with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the "Act", 33 U.S.C., Sections 1311, 1312, 1313, 1316 and 1317.